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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,394

Applicant(s)

PISACANE, F. FREDERICK

Examiner

Shay L Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 21-30 and 39-48 is/are pending in the application.
- 4a) Of the above claim(s) 21-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 39-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/10/05, 10/10/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group 1 in the reply filed on 1/3/05 is acknowledged.

Claims 21-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/3/05.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 44 is rejected under 112, second paragraph for claiming a trademark product.

Applicant may not use a trademark in the claims. The trademark must be removed from the claim language and replaced with the generic terminology.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 8, 39-40, 42-43, 45 and 48 rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (PGPub 2003/0229958) in view of Moore-Johnson et al. (USPN 6481443).

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Thompson teaches a cleaning device comprising a support structure with a handle (figure 1, element 12) having a top palm contact surface, a bottom portion (figure 1, 14) and a stem portion (figure 1, element 16) having a pair of opposed longitudinal concave side surfaces and a pair of opposed parallel end surfaces. The surface of the stem portion extends from the perimeter of the top surface to the perimeter of the bottom portion. A substantially wedge-shaped deformable base (figure 4, elements 70, 80) is attached to the handle bottom portion comprising opposed longitudinal wiper support surfaces and an opposed end surface (claim 1, figure 4). The palm contact surface comprises a longitudinal raised center region and the stem portion concave side surfaces comprise contact regions at least partially opposed to a portion of the top palm contact surface (claims 2-3, figure 4). The base comprises a high-density foam material such as polyurethane (claim 4, paragraph [0031]). The opposed longitudinal wiper support surface intersects and forms an edge at the lower portion of the base (claim 6, figure 4). The base further comprises a concave bottom portion. A material (80, 90) is sized to substantially cover the wiper support surface of the cleaning device (claim 39, figure 4). The material comprises contacting material (figure 4, element 90) and a backing material (figure 4, element 80). The contacting material can be an abrasive material or a cloth material and the backing material is a deformable foam material (claims 40, 43, 45, 48, paragraph [0031]).

Thompson teaches all the essential elements of the claimed invention however fails to teach that the material that covers the wiper support is attached by a hook and loop fastener. Thompson teaches using glue or an attachment means that would allow for removing the material and easily replacing it (paragraph [0033-0034]). Moore-Johnson teaches a cleaning device comprising a support structure with hook and loop material attached so as to mate with a

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pad material having corresponding hook and loop material (col. 2, lines 9-23). It would have been obvious to use hook and loop material as the attachment means on Thompson since it allows the material to be removable and replaceable. Thompson discloses the invention except that a releasable attachment means is not specified. Moore-Johnson shows that hook and loop material is a structure known in the art for releasably attaching (col. 2, lines 9-23). Therefore, because hook and loop material is a known releasable attachment means it would have been obvious at the time of the invention was made, one of ordinary skill in the art would have found it obvious to use the hook and loop material as the releasable attachment means.

Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (PGPub 2003/0229958) in view of Moore-Johnson et al. (USPN 6481443) as applied to claim 1 above and yet further in view of Fisher (USPN 6494767).

Thompson's invention requires that the fasteners would need to be attached to the upper and lower regions of the base to ensure proper attachment of the wiper and the support. Thompson in view of Moore-Johnson teaches that the fasteners are hook and loop material. The hook and loop material would then need to be placed on the upper and lower regions of the support and the corresponding hook and loop material on the wiper would need to be positioned in a location so that it would mate with the hook and loop material on the support. Thompson in view of Moore-Johnson however are silent as to how the fasteners are attached to the support and the base. Fisher teaches a using an attachment means of heat sealing, pressure sensitive sealing or adhesive sealing (col. 3, lines 20-24). It would have been obvious to use any of the attachment means as taught by Fisher for attaching the hook and loop material as taught by Thompson in view of Moore-Johnson since. It would have been obvious to attach the hook and

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loop material to the support and base using any method necessary to ensure the attachment. Heat sealing and using an adhesive are both common and equivalent ways of attaching the hook and loop material to the support structure or the base as taught by Fisher. Therefore it would have been obvious to use any type of securing means so that the hook and loop material is properly attached to the base or support.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (PGPub 2003/0229958) in view of Moore-Johnson et al. (USPN 6481443).

Thompson discloses the claimed invention except for that the contacting material is made from a polyester. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polyester as the contacting material, since it has been held within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.

Claims 1-3, 6-7, 9-14, 39 and 48^{are} rejected under 35 U.S.C. 103(a) as being unpatentable over Charles (USPN 113258) in view of Moore-Johnson et al. (USPN 6481443).

Charles teaches a cleaning device comprising a support structure with a handle (figure 1, 3, element A) having a top palm contact surface, a bottom portion and a stem portion having a pair of opposed longitudinal concave side surfaces and a pair of opposed parallel end surfaces. The surface of the stem portion extends from the perimeter of the top surface to the perimeter of the bottom portion. A substantially wedge-shaped deformable base (figure 3, element C) is attached to the handle bottom portion comprising opposed longitudinal wiper support surfaces and an opposed end surface (claim 1, figures 1-3). The palm contact surface comprises a longitudinal raised center region and the stem portion concave side surfaces comprise contact

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regions at least partially opposed to a portion of the top palm contact surface (claims 2-3, figures 1 and 2). The opposed longitudinal wiper support surface intersect and form an edge at the lower portion of the base. The base further comprises a convex bottom portion as well as a flat bottom portion depending on how the base is orientated with respect to the handle (claims 7-8, figure 1).

A material is sized to substantially cover the wiper support surface of the cleaning device.

Charles teaches all the essential elements of the claimed invention however fails to teach that the material that covers the wiper support is attached by a hook and loop fastener. Charles teaches using glue as a way to attach the material to the base (col.2, lines 1-3). Moore-Johnson teaches a cleaning device comprising a support structure with hook and loop material attached so as to mate with a pad material having corresponding hook and loop material (col. 2, lines 9-23). It would have been obvious to use hook and loop material as the attachment means on Charles since it allows the material to be removable and replaceable. Therefore, when the material is worn out, the entire base does not need to be replaced, only the material. Charles discloses the invention except glue is used as the securing means instead of hook and loop material. Moore-Johnson shows that hook and loop material is an equivalent structure known in the art (col. 2, lines 9-23). Therefore, because these two fastening or securing means were art-recognized equivalents at the time of the invention was made, one of ordinary skill in the art would have found it obvious to substitute hook and loop for glue.

Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charles in view of Moore-Johnson et al. (USPN 6481443) as applied to claim 1 above and yet further in view of Fisher (USPN 6494767).

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Charles' invention requires that the fasteners would need to be attached to the upper and lower regions of the base to ensure proper attachment of the wiper and the support. Charles in view of Moore-Johnson teaches that the fasteners are hook and loop material. The hook and loop material would then need to be placed on the upper and lower regions of the support and the corresponding hook and loop material on the wiper would need to be positioned in a location so that it would mate with the hook and loop material on the support. Charles in view of Moore-Johnson however are silent as to how the fasteners are attached to the support and the base. Fisher teaches a using an attachment means of heat sealing, pressure sensitive sealing or adhesive sealing (col. 3, lines 20-24). It would have been obvious to use any of the attachment means as taught by Fisher for attaching the hook and loop material as taught by Charles in view of Moore-Johnson since. It would have been obvious to attach the hook and loop material to the support and base using any method necessary to ensure the attachment. Heat sealing and using an adhesive are both common and equivalent ways of attaching the hook and loop material to the support structure or the base as taught by Fisher. Therefore it would have been obvious to use any type of securing means so that the hook and loop material is properly attached to the base or support.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Moore-Johnson as applied to claim 4 above and further in view of Gann et al. (USPN 6475199).

Thompson in view of Moore-Johnson teaches all the essential elements of the claimed invention however fails to explicitly state that the base which is made from polyurethane is non-absorbent. While non-absorbency is a property that is common to polyurethane, the reference of

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Gann clearly teaches a polyurethane foam material that is non-absorbent (col. 9, lines 62-65). It would have been obvious to one of ordinary skill in the art to ascertain that the polyurethane foam base in Thompson is also non-absorbent so as to be consistent with the properties of polyurethane.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Charles in view of Moore-Johnson as applied to claim 1 above and further in view of Peterson et al. (USPN 4953689).

Charles in view of Moore-Johnson teach all the essential elements of the claimed invention however fails to teach that the base comprises a concave bottom. Peterson teaches a cleaning device that has a concave portion (figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make one of the sides of Charles in view Moore-Johnson's base concave so as to be able to clean cylindrical elements, thus increasing the uses for the cleaning device.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charles in view of Moore-Johnson as applied to claim 14 above and further in view of Gasparrini et al. (5265537).

Charles in view of Moore-Johnson teach all the essential elements of the claimed invention however fail to teach that the cleaning device may be connected to a mechanical holding structure. Gasparrini teaches a cleaning device comprising a support structure that is connected to a mechanical holding structure so as to ensure contact of the support structure with the substrate to be cleaned (figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the support structure of Charles in view of

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Moore-Johnson in the holding structure of Gasparrini so that the support structure is mechanically urged against the substrate to be cleaned so as to loosen dirt and dust on the substrate.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Moore-Johnson as applied to claim 39 above and further in view of Pisacane et al. (USPN 6004640).

Thompson in view of Moore-Johnson teach all the essential elements of the claimed invention however fail to teach that the material on the support surfaces is UltraSORB®. Pisacane teaches a material used to clean metal, glass or plastic surfaces without scratching (abstract). The material is a polyurethane foam known as UltraSORB® (applicant's specification, [0052]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use UltraSORB® as the material for the support surfaces, since it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.

Claims 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Moore-Johnson as applied to claim 39 above and further in view of Wang et al. (USPN 6855266).

Thompson in view of Moore-Johnson teach all the essential elements of the claimed invention however fail to teach that the material on the support surfaces is an abrasive material such as polycarbonate. Wang teaches a cleaning device comprising an abrasive material made of polycarbonate (col. 8, lines 33-48) to aid in cleaning and polishing surfaces. It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to use polycarbonate as the material for the support surfaces, since it has been held within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Kim can be reached at 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb
2/25/05


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